BASEMENT

1861

LIBRARY
OF THE
MASSACHUSETTS INSTITUTE
OF TECHNOLOGY

75

Dewey

MAR 23 1976
DEWEY LIBRARY

WORKING PAPER
ALFRED P. SLOAN SCHOOL OF MANAGEMENT

A FRAMEWORK FOR STRATEGIC PLANNING IN MULTINATIONAL CORPORATIONS

Peter Lorange*

Revised, January 1976 WP 821-75

MASSACHUSETTS
INSTITUTE OF TECHNOLOGY
50 MEMORIAL DRIVE
CAMBRIDGE, MASSACHUSETTS 02139

MAR 23 1976

A FRAMEWORK FOR
STRATEGIC PLANNING
IN MULTINATIONAL CORPORATIONS

Peter Lorange*

Revised, January 1976 WP 821-75

---

* Assistant Professor of Management Science, Sloan School of Management, Massachusetts Institute of Technology.

A revised version of this paper will appear in the June 1976 issue of the Journal of Long Range Planning.

HD28
M414
no. 821-75

M.I.T. LIBRARIES
MAR 23 1976
RECEIVED

Introduction

Strategic planning in a multinational corporation has a two-fold task: to identify the strategic options most relevant to the corporation and to "narrow down" these options into the one best plan. Stated this way there is of course nothing fundamentally different between the strategic planning task of a multinational corporation and that of any other large corporation. However, since multinationals offer several complex and distinctively different approaches to organizational design and planning, it is useful to examine some of the problems of strategic planning in the context of the multinationals.

The broad definition of the strategic planning tasks given above has several implications. In order to be able to identify the most relevant strategic options, the corporation needs to *adapt* continuously to the environment. Also, in order to narrow down the strategic options into the one best plan, the corporation must be able to *integrate* its many diverse activities. In this article we shall attempt to clarify the major purposes of planning in the multinationals in terms of adaptation and integration needs.

Given the diversity of settings in which multinationals operate, the adaptation and integration tasks will not be the same for all multinationals. Indeed, the opposite is true; each multinational will be faced with unique adaptation and integration tasks. However, in order for us to develop some generalizations about the adaptation and integration tasks of planning in multinationals, we shall start out by identifying a few multinational corporate archetypes, followed by a discussion of their planning purposes in terms of adaptation and integration. We shall then present some normative propositions about adaptation/integration and the costs of striking a reasonable balance

between the two in planning systems.

Empirical findings on long-range planning in multinationals reported by others indicate that (a) it is hard to find actual examples of multinationals that in all respects fit into any of the archetypes to be suggested[1] and (b) the formal planning systems of multinationals seem to be much less developed than those we recommend here.[2] However, we do not see this as limiting the value of the arguments to be presented. We intend to propose some fundamental dimensions of planning for multinationals that might be useful to improve the understanding of the planning phenomenon. Obviously the proposed normative framework is not intended for uncritical adaptation in specific cases.

---

[1] See Channon, Derek F., "Prediction and Practice in Multinational Strategic Planning," paper presented at the 2nd Annual European Seminar on International Business, European Institute for Advanced Studies in Management, 1974.

[2] See Schwendiman, John S., "International Strategic Planning: Still in Its Infancy," Worldwide P&I Planning, Sept.-Oct. 1971.

A Taxonomy of Multinational Corporations

We shall distinguish between types of multinational corporations according to the dimension along which the organization has been structured.[3] There seem to be two dimensions that might dominate the organizational structure: the product dimension, which occurs in companies which have adopted a so-called divisionalized structure, with each division responsible for one class of products; and the geographical area dimension, wherein each division is responsible for carrying out all the corporation's business within a given geographical area.

Complete domination of corporate structure by one dimension can prove to be inefficient. For instance, there might be considerable duplication of effort by having the product divisions operate their own separate organizations in one country. When evolving from such a product structure, the matrix structure might be described as consisting of a *leading* product dimension and a *grown* area dimension.[4]

---

[3] This section is based heavily on Lorange, Peter, "Formal Planning in Multinational Corporations," *Columbia Journal of World Business*, Summer 1973. See also Lorange, Peter, "La Procedure de Planification dans les Entreprises Multinationales," *Revue Economique et Sociale*, March 1973. Other classifications have been proposed in Rutenberg, David P., "Organizational Archetypes of a Multinational Company," *Management Science*, Vol. 16, No. 6, Feb. 1970; Perlmutter, Howard V., "L'Entreprise Internationale-Trois Conceptions," *Revue Economique et Sociale*, May 1965; and in Robinson, Richard D., *International Business Management*, Holt, Rinehart and Winston, Inc., New York, 1973, Chapter 8.

[4] Davis has developed the concepts of "leading" and "grown" dimensions of matrix structures. See Davis, Stanley M., "Two Models of Organization: Unity of Command versus Balance of Power," *Sloan Management Review*, Fall 1974.

Alternatively, when evolving out of an area-dominated structure the matrix structure would have a leading area dimension and a grown product dimension.[5]

So we perceive four types of multinationals, depending on the degree of emphasis they put on the product dimension and/or the area dimension. This continuum of multinationals is shown in exhibit 1.

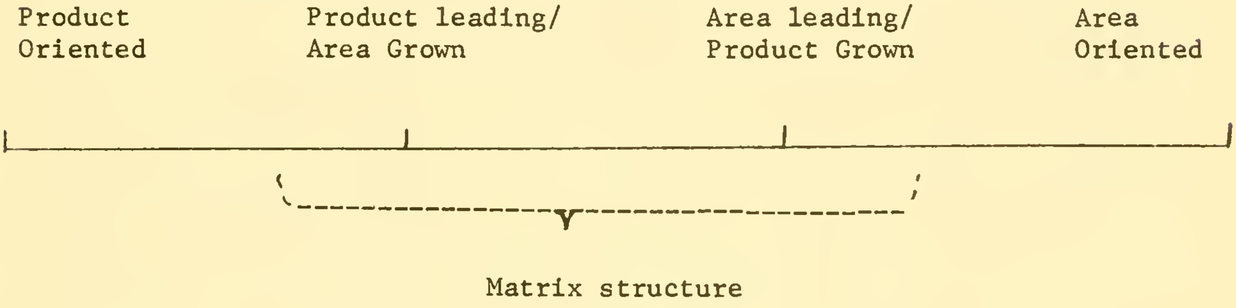

Exhibit 1. The Taxonomy of Multinational Corporations According to Relative Emphasis on Product Orientation vs. Area Orientation

It should be stressed that typologizing into four categories is an oversimplification, since we are really dealing with a continuum. Further, dimensions other than product versus area orientation are likely to be considered in a realistic taxonomy of multinational corporations. Also, the taxonomy adopted does not apply to the early evolutionary stages of corporate internationalization. Thus, much richer and probably also more realistic classifications may conceivably be developed.[6] However, keeping the purpose of this article in mind, little seems to be gained by adopting a more detailed taxonomy of multinationals.

---

[5] We shall, however, not imply that the evolution of matrix structures will have to be towards an ultimate equal balance between the two dimensions.

[6] See Robinson, R. op. cit.

Planning Purposes: Adaptation and Integration Needs

Let us analyze the nature of the requirements for adaptation and integration in each of the four multinational archetypes we are considering.

(a) The product-organized corporation

This corporation will conduct its worldwide activities by means of several divisions, each responsible for carrying out the business strategy for one class of products on a worldwide basis. In terms of *adaptation*, then, each *division* will be responsible for scanning its own business environment. This implies a heavy pressure on each division to adapt to changes in each national market. How should the marketing promotion campaign be laid out for the promotion of a division's products in a particular country? Which models seem particularly worthwhile emphasizing in a given country? The pressures for scanning and adaptation within each worldwide product division will be on monitoring changes in area trends and taking advantage of the resulting opportunities. The major responsibility for carrying out this scanning rests on functional managers within each division. Among the advantages of this form of adaptation will be a basis for the development of strong international plans for each business, which may enjoy the benefits of economies of scales in worldwide product strategies. Among the disadvantages may be the lack of adaptation to diverse geographical area inputs. Potential duplication of efforts by several divisions in interpreting the need for adaptation to the same geographical area may also be a problem.

At the *corporate* level of the product-division type of corporation *adaptation* tasks will center on the "mix" of the portfolio of divisions. Multinational strategy questions will not be addressed at headquarters, except when reviewing division plans to probe their soundness. Important

issues for corporate management are how to adapt to changing patterns of inflation/deflation and/or devaluation/revaluation, and which divisions should receive added/diminished emphasis, given differences in the nature of products, capital intensity, and relative strength in an area that is becoming more/less attractive. At the extreme, these resulting corporate adaptation needs may lead to the triggering of acquisitions, i.e., involvement in new business lines on a worldwide basis, or divestitures, i.e., pull-out of a business on a worldwide basis.

The integrating task of the worldwide product division will be primarily to make sure that the overall activities of the division are consistent. There will be a need to integrate the strategic programs within each product division as well as the various functional activities. On the other hand there will probably be relatively less need for area integration, since that each program and/or function is slated to work independently within the worldwide area. Thus, the main coordination focus will be on each worldwide business line activity.

At the corporate level there will be a need to integrate and coordinate the portfolio of worldwide business divisions, emphasizing financial funds flow interrelations among the divisions. Again, any portfolio adjustments resulting from a need for stronger integration will be in modification of the plans of one or more of the product divisions, and not in area coordination directly.

It can be deduced that the formal organization structure itself plays a major role in facilitating the integration task. A major reason for the particular choice of the worldwide product division structure is in fact the need to integrate this type of company's worldwide activities along the product dimension. Thus, the formal organizational chart will

typically be a reflection of the integration needs of an organization.[7]

(b) The geographicaly area-organized corporation

In order to dichotomize the adaptation needs among the various multinational archetypes as clearly as possible we shall consider the opposite of the product-organized multinational. This is the multinational corporation which is organized in a number of geographical divisions, each undertaking a relatively broad spectrum of businesses within its own area of the world. We shall first discuss the adaptation needs within each area division, and then consider adaptation challenges at the corporate level.

A primary task for each area division will be adapting its product portfolio to the area conditions and determining which products or businesses to emphasize. This will be the main responsibility of the general manager of the division, who will rely to a large extent on his business managers within the area. Thus, each area division will have considerable autonomy in providing environmental scanning data from its part of the world. Headquarters for the area divisions will probably be staffed with executives mostly from the host country and have broader local expertise than the product-oriented divisions. The latter divisions will probably have general worldwide rather than local geographical expertise and will most likely be staffed with executives from several nations. Divisions of the area-dominated multinational will have the potential for strong geographical area strategies and plans. The biggest disadvantage is probably the lack of adaptation of product strategies to several geographical areas. The adaptive efforts might lead to too much duplication

---

[7] See Chandler, Alfred D., Strategy and Structure, M.I.T. Press, 1962, and Galbraith, Jay, Designing Complex Organizations, Addison-Wesley, 1973.

of efforts in production, new product development, etc. among the areas and the risk of too much fragmentation, particularly if the geographical areas are small.

At the corporate level the adaptation requirements will be related to balancing the portfolio of area divisions. The task will be to assess the long-term health of each area given the composition of products of each division. Given devaluation/revaluation and/or inflation/deflation opportunities and/or threats, corporate will evaluate which products seem to have the best future in various areas and which should be de-emphasized; this may lead to changes in the portfolio. The central question will be whether the firm is emphasizing a set of products which result in the best worldwide geographical balance. We shall expect to find a much higher need for international staffing and broad worldwide expertise at the corporate level in the area-dominated multinational than in that which is product-oriented.

There seem to be diametrical differences between the two multinational archetypes in their needs for international competence and staff skills to carry out the adaptation tasks of planning at corporate as well as at divisional levels.[8] This is not surprising, since the adaptation needs for the geographical area-organized multinational generally are so different from the adaptation needs of the worldwide product-oriented multinational. The product division will focus on adapting to changing geographical area patterns, the geographical area division to

---

[8] Some of the differences in staffing patterns for nationals vs. non-nationals of four large European-based multinationals found by Davis, Edstrom and Galbraith support this. See Davis, Harry, Anders Edstrom, and Jay Galbraith, "Transfer of Managers in Multinational Organizations," European Institute for Advanced Studies in Management, Working Paper 74-19, Brussels, 1974.

changing business or product opportunities. At the corporate level, too, the adaptation challenges will be fundamentally different, although in both instances the task will be to monitor the balance of the portfolio of divisions according to devaluation/revaluation and/or inflation/deflation patterns. Thus, the adaptation needs for the divisional and corporate levels of the two types of multinationals will be structured along the _opposite_ dimension to the one on which the corporation is organized.

The _divisional_ level needs for _integration_ will focus on pulling together the diverse business activities within the given area. This implies that product policies within the area should be integrated, and that the program and/or functional activities within the area will be coordinated. There will probably be less pressure to integrate the businesses worldwide, though, since each division is responsible for adapting a business or product exclusively to its given area. The _corporate_ level will coordinate the several area divisions so that the portfolio may become integrated; portfolio adjustments will probably be in terms of areas, not products. Again, the choice of organizational structure, which in this case is primarily along the area dimension directly reflects the integrative needs of the corporation.

Let us now leave the two extreme positions and consider the matrix structures, which will be faced with adaptation and integration tasks along _both_ the product _and_ area dimension. Before discussing the adaptation and integration tasks of our two matrix-based archetypes, however, let us review some relevant facts about coordination between the dimensions of a matrix structure. Effective coordination between the matrix dimensions must involve people; managers representing each dimension

must get together to share information and work out decisions that take into account the considerations of each dimension. In order to facilitate coordination, then, it seems reasonable to form committees.[9] Staffing of these committees should reflect the matrix dimensions involved, and also be manned with executives from appropriate organizational levels.

A major implication of the decentralized organizational structures considered here is that the responsibility for business strategy formulation and implementation as well as the bulk of the action program decisions will be made at the division level. Consequently, it will be at this level that integration of the inputs from the various dimensions will have to take place, as each dimension should influence the way that business strategy decisions are made and carried out. It should be noted that a matrix structure does not imply that representatives from each dimension will have to cooperate in detail to reach decisions at each level of the organization. Rather, the multidimensional cooperation will take place at one level, namely through the business coordination committees at the division level. Below this, there will generally be unidimensional reporting to cope with the functional strategy tasks. At the corporate level only the leading dimension will be represented to formulate and implement a portfolio strategy.

(c) Product leading/area grown matrix structure

This type of multinational will have a product-dominated organizational structure. However, going all the way along the product dimension with parallel business divisions operating worldwide would mean forfeiture of many of the benefits of being a large multinational and

---

[9] See Goggin, William, "How the Multi-Dimensional Structure Works at Dow-Corning," Harvard Business Review, Jan.-Feb. 1974. See also Davis, op. cit.

not merely a collection of business division. Thus, the rationale for the matrix structure is the acknowledgement that more than one dimension might be beneficial and a willingness to capitalize on potential economies of scales.

What requirements for adaptation face the product leading/area grown matrix structure? The answer is a combination of the adaptation requirements facing the worldwide product division organizations and the geographical area division organizations, but with relatively more emphasis of the factors discussed for the product division organization. Thus, at the divisional level the adaptation requirement will be dominated by changes in the area conditions. However, some emphasis will also be put on assessing changes in the business product dimension within each area. At the corporate level, similarly, adaptation of the portfolio should be primarily a response to area reconsiderations but also for business line reconsiderations.

In this type of corporation, which typically has evolved from a very strong dominance of the product dimension to the present balance, the integrating needs will probably not be too different from those of the worldwide product-organized corporation. At the division level the primary integrative concern will be to get the product lines together. However, a secondary concern will be to ensure the product integration in such a way that the areas also are integrated to the largest possible extent. At the corporate level the product dimension will again be the one receiving the most attention for integration, so that the portfolio of worldwide product activities will be coordinated. However, this portfolio will need to be modified to take into account area coordination.

(d) Area leading/product line grown matrix structures

For this last type of matrix structure the opposite of what was the case in the previous section will be the pattern. The *adaptation* requirements of the product dimension will be the most important, both at divisional and corporate levels. However, the area adaptation dimension will also play a role.

The *integrative* needs are likely to be similar to those of the corporation which is geographical area divisionalized. At the divisional as well as the corporate level the area dimension will probably be the one requiring the most integrative attention. This should be modified by the need to integrate the product dimension as well.

Summary pattern of adaptation and integration requirements

A summary of the adaptation and integration requirements of each of our four multinational archetypes is presented in Exhibit 2. As we see there is a continuing shift in adaptation and integration requirements as we go from one organizational extreme to the other. It is important to recognize that the adaptation needs fall into a pattern along a continuum which goes *contrary* to the product/area organizational structure continuum of multinationals, while the integration needs fall along a continuum that goes in the *same* direction as the organization structure. This leads us to our first normative statement, namely that while the *integration task* of planning should be undertaken in such a way that it *follows the organizational structure*, the *adaptation task* should be carried out in a direction *contrary to organizational structure*.

Taxonomy of Corporations	Adaptation	Integration
Worldwide Product Divisions	Along Area dimension	Along Product dimension
Product Leading/ Area Grown Matrix	Primarily along Area dimension; some along Product dimension	Primarily along Product dimension; some along Area dimension
Area Leading/ Product Grown Matrix	Primarily along Product dimension; Some along Area dimension	Primarily along Area dimension; some along Product dimension
Geographical Area Divisions	Along Product dimension	Along Area dimension

Exhibit 2. Summary of the Integration and Adaptation Planning Tasks of the Multinational Corporations in our Taxonomy

Costs of Planning in Multinationals

In this section we shall consider some of the costs of undertaking planning in each multinational archetype. One might ask whether it would not have been more natural to discuss first the issues of design and implementation of planning systems so that they might fulfill the requirements outlined in the previous section, then to consider the costs associated with the systems design alternatives. It shall turn out, however, that cost considerations may have a major influence on the choice of the planning systems design approach. Thus, by discussing

costs of planning at this point, we shall be able to advance a more cost-effective planning systems design approach.

The relative proportion of overall planning costs attributed to the area dimension versus the business dimension of course changes as one moves from the one extreme to the other, as illustrated in Exhibit 3.

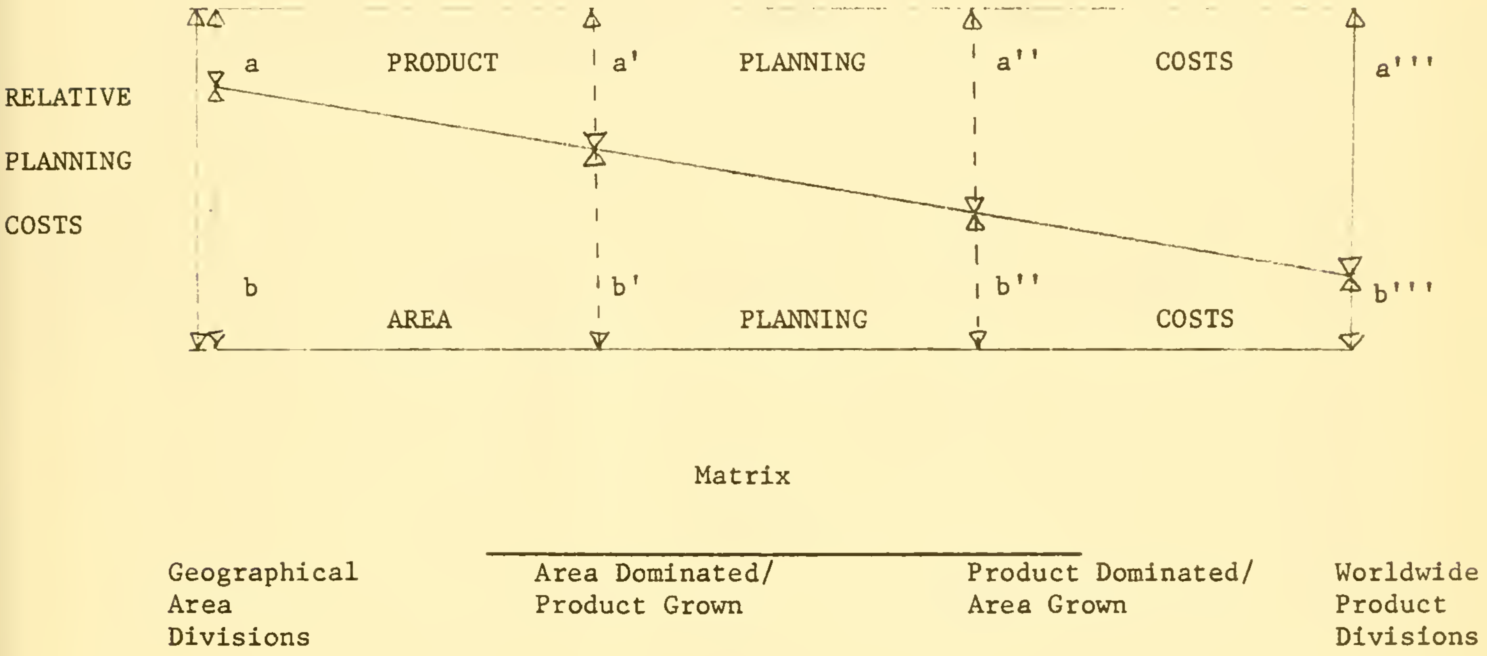
RELATIVE
PLANNING
COSTS
a
PRODUCT
a'
PLANNING
a''
COSTS
a'''
b
AREA
b'
PLANNING
b''
COSTS
b'''
Matrix
Geographical Area Divisions
Area Dominated/ Product Grown
Product Dominated/ Area Grown
Worldwide Product Divisions

Exhibit 3. The Relative Proportion of Planning Costs Attributable to the Product Dimension vs. the Area Dimension. The a's Indicate Product Dimension Cost Functions. The b's Indicate Area Dimension Cost Functions.[10]

We see that the relative importance of each dimension's planning cost segment will be dependent on the multinational archetype at hand. This, however does not imply that the *absolute* costs of planning remain the same for each archetype. For instance, evolving from a structure

---

[10] Galbraith has suggested this exhibit. See Galbraith, Jay R., "Matrix Organization Design; How to Combine Functional and Project Forms," *Business Horizons*, Summer 1964(Exhibit 3), p. 70.

with geographic area divisions to a matrix with the area dimension dominated and product dimensions grown, the purpose will be to maintain a planning strength along both dimensions. The planning costs of the area dimension will remain more or less the same, and the planning costs of the product dimension will be added. Thus, the nature of the absolute costs of planning implies that Exhibit 3 will have to be modified, as illustrated in Exhibit 4:

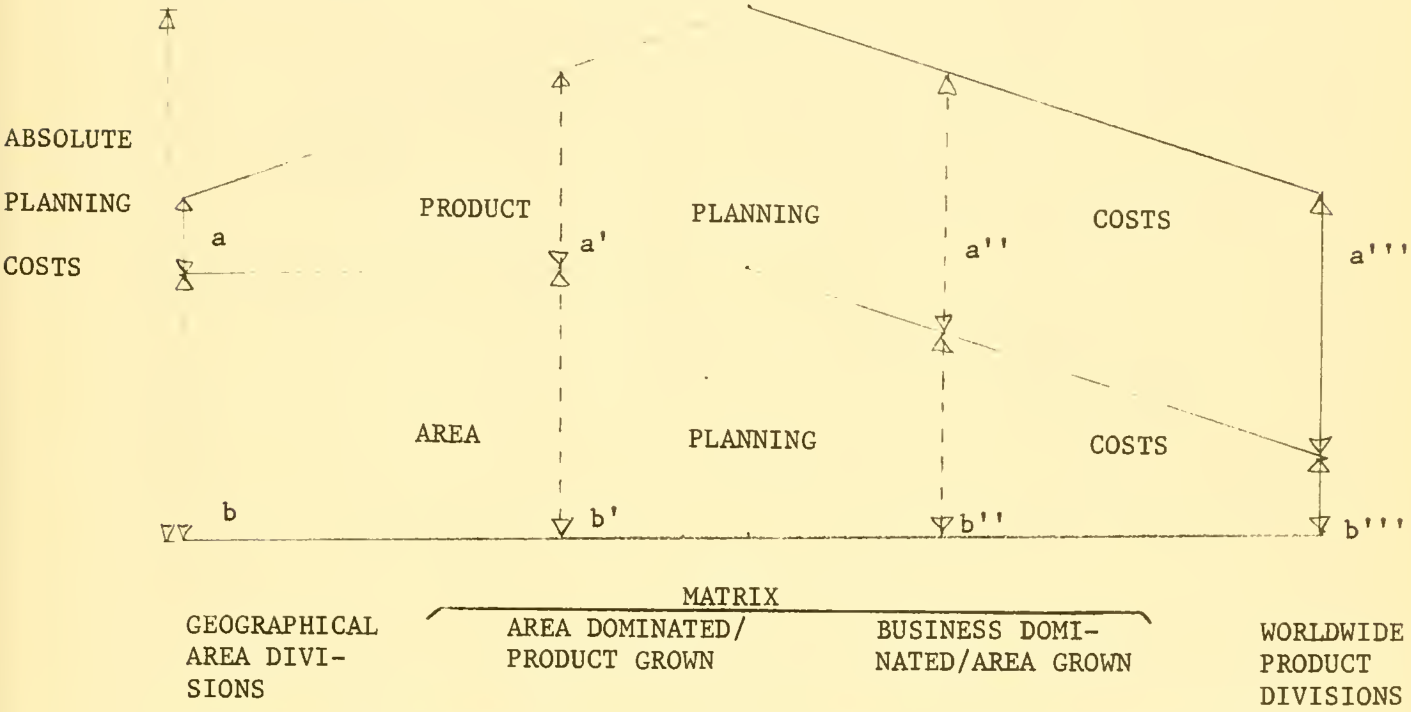

Exhibit 4. The Absolute Proportion of Planning Costs Attributable to the Product Dimension vs. the Area Dimension. The a's Indicate Product Dimension Cost Functions. The b's Indicate Area Dimension Cost Functions.

From Exhibit 4 one will see that the choice of organizational structure is not a free one, since the planning costs associated with a matrix structure may be substantially higher than for "extreme" structures dominated by one dimension. Thus, one may conclude that only in instances in which the added benefits accrued by carrying two dimensions outweigh the added costs will the adoption of a matrix structure be justified.

Also, the instances in which a matrix planning structure will be justified cost benefit-wise will probably be fewer than commonly anticipated, given the significantly higher than expected planning costs associated with such systems.

Diminishing the costs of planning in matrix archetypes

Given the obvious potential payoffs of adapting and integrating along more than one dimension, and disregarding the added planning costs, we should discuss the two ways of changing the cost benefit tradeoff point: increasing the benefits from planning in the matrix archetypes, and decreasing the planning costs of these archetypes. We shall propose a way of decreasing the planning costs which turns out also to increase the benefits of planning.

Keeping in mind that the planning process implies a narrowing down of strategic options which may come about through a series of stages, say objectives-setting, planning, and budgeting, we may ask the following question: Are the adaptation and integration requirements equally important at each stage of progressive narrowing down?

First we should consider which is the more important purpose of the objectives-setting stage, to ensure adaptation or integration. At this stage the major planning task should be to reexamine the fundamental assumptions for being in business, evaluate opportunities and threats, and consider whether the rationale for the firm's policies is still valid; in other words, where the firm stands relative to the environment. A realistic and effective adaptation to the current environmental conditions is the major concern. Integration, on the other hand, plays a lesser role at the objectives-setting stage.

At the next narrowing down stage, the planning stage, we still

have to cater to the need for adaptation. More detailed plans will be developed in order to follow up on the major issues for adaptation to the environment identified in the objectives-setting stage. Typically, there will be the calculation and evaluation of a number of "what ifs" to assess the effects of various environmental changes. There will, however, be an increasing need for integration at this stage to ensure that the various parts of the plans are consistent, that they are exhaustive when taken together, based on common assumptions, and that all relevant people have had a chance to contribute to the plans.

At the third and final stage of narrowing down the task will be to prepare more detailed budgets within the framework set out in the plans. Here the major thrust will be on integration, with little concern for adaptation at this stage.[11]

We have shown that in each of the matrix archetypes there will be different roles for the business and the area dimensions with respect to performing the adaptive and integrative tasks, and that the relative importance of these tasks shifts over the stages of narrowing down. We can now suggest a division of labor between the dimensions, as indicated in Exhibit 5.

---

[11] See Vancil, Richard F. and Peter Lorange, "Strategic Planning in Diversified Corporations," Harvard Business Review, Jan.-Feb. 1975, for an approach to a three-step narrowing down of strategic options.

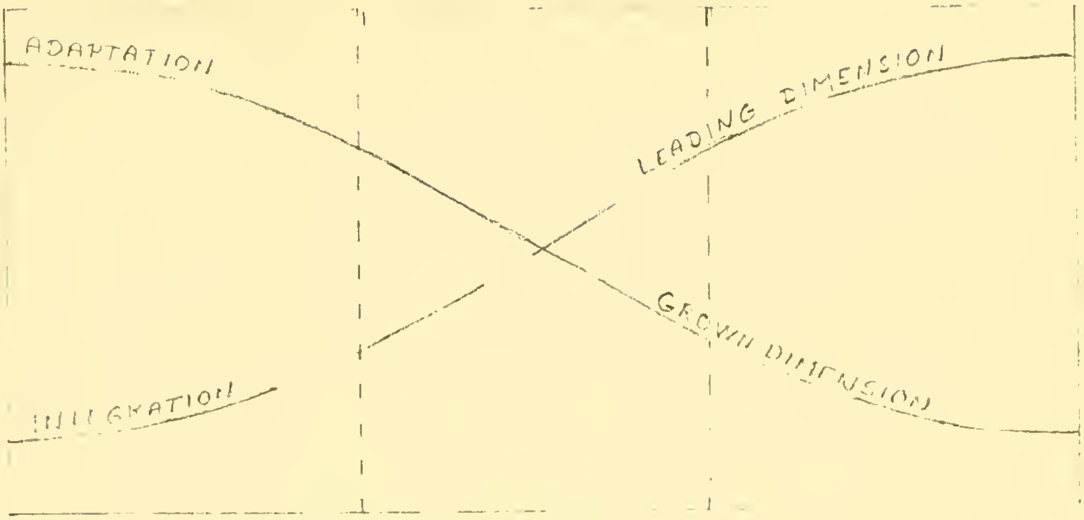

Exhibit 5. The relative importance of the adaptation function of the grown dimension vs. the integration function of the leading dimension at each of the "narrowing down" stages.

We see that the adaptation task, to be performed primarily by the grown dimension (in accordance with the argument summarized in Exhibit 2), will play a relatively more important role in the early part of the narrowing down process than the integration task to be performed by the leading dimension. Later in the narrowing down process, however, the roles will be reversed and the leading dimension will be relatively more dominating.

Before discussing the specific implications of this opportunity for division of labor in the planning function of the matrix archetypes, let us emphasize that we are talking about relative importance of the tasks of the two dimensions. For instance, in a matrix structure with a mature and strong worldwide product dimension and a recent and weak area dimension the absolute importance of the leading dimension may

prevail at all stages, although the relative emphasis will nevertheless follow the pattern indicated in Exhibit 5.

Let us also consider how the planning tasks of our two extreme organizational structures, the worldwide product organization and the area organization, can be interpreted in terms of Exhibit 5. If neither of these organizational forms has a grown dimension, will the adaptation task be taken care of? Yes, to some extent, since the leading dimension will adapt to environmental changes within relatively narrow limits. However, a lesser need for environmental adaptation will be perceived in a structure organized along one of the two extreme archetype forms. Also, the capacity for environmental adaptation will be much greater in a matrix organization. In fact the environmental adaptation need is probably the major reason for organizing along a matrix structure.

What are some of the implications that the pattern outlined in Exhibit 5 will have on the division of labor in the execution of the planning function? We see that extensive interaction among executives of the two dimensions of the matrix structure does not have to take place all through the narrowing down process, but only during the middle stage, i.e., the planning stage. An added sense of direction can probably be achieved in that it will be clearer which group of people will be primarily responsible at each stage of the narrowing down. The communication flows of the planning system can be simplified and be more explicit in terms of indicating who is responsible for what.

In addition to improving planning by instilling an added sense of task direction there will probably also be considerable cost savings. The cost of planning in a matrix should be considerably less through division of labor than if the conventional approach were followed,

namely full-blown interaction between the dimensions at each stage of the narrowing down process.

This brings us to our second general normative statement, that costs of planning should be a major consideration in establishing an appropriate balance between adaptation and integration. The relative balance will be skewed towards more integration emphasis and less adaptation emphasis because of the costs associated with planning. However, emphasizing adaptation during the early stages of planning and integration during the later stages will tend to counteract this relative imbalance and will allow for a strengthening of the system's adaptation ability.

Conclusion

We have analyzed the adaptation and integration requirements of several corporations within a taxonomy of multinationals and have come up with a pattern of planning tasks for the multinationals. It turned out that to carry out this planning would be exceedingly expensive for several of the corporations. However, we were able to suggest a way to simplify planning and utilize task specialization. We suggest that this approach might lead to an operational, simplified, more effective, and less expensive planning activity in multinational corporations.

Date Due

BASEMENT

MAY 15 1986

FEB 19 1990

DEC. 07 1994

OCT 22 1986

MAY 11 1987

[redacted]

APR

JE 15

JUL 13 93

MAR 24 1986

Lib-26-67

T-J5 143 w no.821- 75
Lorange, Peter/A framework for strateg
726912 D*BKS 00020651
3 9080 000 656 212

T-J5 143 w no.822- 75
Haehling von L/Optimizing claims fluct
725830 D*BKS 00019566
3 9080 000 641 610

T-J5 143 w no.823- 75
Lilien, Gary L/The ADVISOR* project :
725833 D*BKS 00019874
3 9080 003 008 072

T-J5 143 w no.824- 75
Schein, Edgar /Attitude change in the
725836 D*BKS 00023126
3 9080 000 689 205

T-J5 143 w no.825- 75
Kobrin, Stephe/Industrialization and v
725880 D*BKS 00019848
3 9080 000 645 439

T-J5 143 w no.826- 75
Schein, Edgar /Managers at mid-career
728111 D*BKS 00027765
3 9080 000 747 938

T-J5 143 w no.827- 75
Haehling von L/The probability distrib
726374 D*BKS 00019567
3 9080 000 641 644

MIT LIBRARIES
3 9080 004 667 512

828-76 – The record [illegible] [illegible] 4/2007
see the check-out [illegible]
[illegible] [illegible]
JS

HD28.M414 no.829- 76
Merton, Robert/The impact on option pr
726747 D*BKS 00020645
3 9080 000 656 105